A BIOGRAPHICAL NOTICE OF W. S. W. RUSCHENBERGER, M. D.

BY EDWARD J. NOLAN, M. D.

Since the first recorded meeting of the founders of the Academy, "friends of science and of rational disposal of leisure moments" at the house of John Speakman, January 25, 1812, the society has been served by a succession of devoted men who have given their time, their means and their best thought to the promotion of its interests. The membership at large, however, has been for the most part composed of specialists in science who have had neither time nor inclination to occupy themselves with administrative affairs, and a much larger number who have been content to lend their support, moral and pecuniary, to an institution for the advancement of learning without taking part intimately in the details of its work.

The services rendered by the subject of this notice during the last twenty-six years of his life are of such character and magnitude that they have secured for him a distinguished position among the benefactors of this society. He was intellectually in close sympathy with the Academy's work, while the termination of his active connection with the United States navy enabled him to devote himself with tireless fidelity to the duties of the several executive positions in which he was placed.

William Samuel Waithman Ruschenberger was the son of Peter Ruschenberger, a sea captain, and Ann Waithman. His mother, the third in a family of nine children, was born near Bridgeton, Cumberland Co., N. J., June 18th, 1785. Her son was also born there September 4, 1807. Prior to this, however, her father and his family had moved to Philadelphia, the young couple living with them, and here a daughter was born. Three months before the birth of the son Captain Ruschenberger and all his crew were lost at sea, leaving the wife and children in straitened circumstances, so that it became necessary to add to their income by literary work. Sacrifices were made to secure a good education for the boy, who co-operated earnestly with his mother to that end. The details of his early training are not known, but he attended schools in New York and Philadelphia, and studied Latin with an Irishman of culture who had been compelled to leave the country of his birth

for political reasons. The pupil declared more than half a century later that his teacher's bitter denunciation of English injustice had permanently influenced his political opinions. Other particulars of his early life are wanting.

He was appointed to the United States navy from the State of New Jersey, August 10, 1826, when not quite nineteen years of age. He entered the service as surgeon's mate, his first cruise being on the U.S. S. Brandywine of the Pacific Squadron. His fitness secured for him the position of commodore's secretary, in which capacity he served under Commodore Jacob Jones during 1828 and 1829. He had, in the mean time, matriculated in the Medical Department of the University of Pennsylvania from which institution he received his degree of Doctor of Medicine, March 24, 1830.

He was commissioned as Surgeon in the Navy, April 4, 1831, and was assigned to the sloop Falmouth, also of the Pacific Squadron, on which he served from June, 1831 to February, 1834. As a result of this voyage he published in Silliman's Journal for 1831 and 1833 a translation of a paper by Dr. C. Bertero entitled, "A List of the Plants of Chili." This appears to have been his earliest contribution to science.

On his return home he published in 1834 his first important work under the title, "Three Years in the Pacific." In the prefatory note the author states that he has "avoided obtruding himself upon the attention of the reader and has indulged in but few reflections, being content to present naked facts and allow each one to dress them for himself and draw his own conclusions." This statement characterizes the work with a fair degree of accuracy. The social and political life of Brazil, Chili, Bolivia and Peru are described with animation, the style, especially in the earlier chapters, being diffusive and somewhat florid, rather sharply contrasting with the somewhat sententious diction of his later work. There is a vouthful sparkle and sense of humor in his descriptions of persons and incidents, which, in spite of the fidelity with which he adheres to the promise of his preface, make the book a charming narrative of adventure. The young surgeon, moreover, evidently regarded it as his duty to convey as much solid information as possible, and geographical, political and sociological notes, bearing the stamp of accuracy, are not wanting. A characteristic abhorrence of sham and pretence is manifest throughout the book, while the religious

opinions and practices of the people are referred to with respect and courtesy, although, as was inevitable, with plainly expressed dissent. The friends of the young author surely had reason to be satisfied with his first literary offspring.

He was Fleet Surgeon on board the U. S. S. "Peacock" of the East Indian Squadron from 1835 to 1837. This cruise resulted in his second work, "A Voyage Round the World, including an Embassy to Muscat and Siam in 1835, 1836 and 1837." The volume bears the date 1838 and is dedicated to Dr. Samuel George Morton, then Corresponding Secretary of the Academy, of which Dr. Ruschenberger had been elected a correspondent in 1832. He was transferred, in compliance with the By-Laws, to the class of active members on his taking up his residence in the city.

The superb opportunity of acquiring a knowledge of portions of the world not then known nearly as well as they are now had been improved to the utmost. Besides the journal of an embassy from the Government of the United States to the courts of Muscat, Siam and Cochin-China the work embraces sketches in Zanzibar, Arabia, Hindostan, Ceylon, Java, Siam, Cochin-China, China, the Sandwich Islands, Mexico and California. The style, although matured, is bright and animated, and the broad spirit of toleration and fairness of the earlier work is maintained. A growing fondness for natural history and an increased familiarity with the characters of animals and plants are also evident.

The same year he published in Silliman's Journal a paper entitled "Remarks on the Barometer with a table of meteorological observations made on board the U. S. Ship 'Peacock' from July 8 to August 17, 1837, during a passage from Peru to the United States, by way of Cape Horn."

He was married to Miss Mary Baynton Wister, the daughter of Mr. Charles J. Wister, of Germantown, October 23, 1839. Four children were born to them, three daughters and one son, of whom the latter, Lieut. C. W. Ruschenberger, of the Navy, alone survives. Mrs. Ruschenberger died November 1, 1893.

Dr. Ruschenberger was stationed at the Naval Rendevons in Philadelphia from 1840 to 1842. He now placed himself in active communication with the Academy, frequently attending the meetings and contributing to the library and museum, his first recorded contribution to the latter being specimens of Chiton, supposed to be new species, from Chapman's Island.

It was probably during this period that he prepared the textbooks of natural history which subsequently appeared under the following titles:—

Physiology and Animal Mechanism, 1841.

Mammalogy. Natural History of Mammiferous Animals. 2nd Book of Natural History, 1842.

Mollusca. Elements of Conchology, 1843.

These works were from the text of Milne Edwards and Achille Compte, and were the first of a promised series which was not, however, continued.

A Lexicon of Terms in Natural History, 1850.

Elements of Natural History, embracing Zoology, Botany, and Geology. Two volumes, 1850.

More than one member of the Academy has acknowledged his indebtedness to these text-books for his first knowledge of natural history. They are purely technical and possess no literary grace other than that of clearness and directness of statement.

He served at the Naval Hospital, Brooklyn, from 1843 to 1847, and while there organized the Naval Laboratory for supplying the service with pure drugs and reliable instruments. This establishment is said by his contemporaries to have been much needed and to have especially proven its usefulness during the trying period of the civil war. About this time he published a number of pamphlets on the relations of the medical corps to the United States Navy with a view to securing proper definition of authority, rank, responsibility, etc.

He was again Fleet Surgeon of the East India Squadron from 1847 to 1850. Some of his observations during this cruise were embodied in a series of papers contributed to the Southern Literary Messenger for 1852 and 1853. They were issued later in book-form under the title "Notes and Commentaries during a Voyage to Brazil and China in the year 1848." As might be expected from the mode of publication, the work has not the sustained interest or value of his other volumes of travel. It is discursive and disjointed, although still bright and instructive.

On his return to America he was assigned to duty in Philadelphia, and immediately resumed his active connection with the Academy.

He served as a member of the Publication Committee from 1851 to 1854, and in September of the earlier year, he was appointed to prepare a new and extended notice of the Academy. That he lost no time in the performance of the work assigned to him is evident, for the notice was read to the meeting of February 10, 1852, a vote of thanks being then adopted and communicated to the author through a committee consisting of Messrs. Vaux, Bridges and Pearsall. The paper was published under the title "A Notice of the Origin, Progress, and Present Condition of the Academy of Natural Sciences of Philadelphia." A second edition was issued in 1860.

He served as Fleet Surgeon of the Pacific Squadron from 1854 to 1857.

In January, 1858, a committee of Academicians was appointed to confer with one from the Biological Society with a view to a union of the two bodies. The report was evidently written by Dr. Ruschenberger. The question of Sections is carefully considered in view of the character of the Academy's work, which up to that time, had been almost entirely confined to the study of objective natural history, the recording of specific differences and resemblances of form, classification, and geographical distribution, while the province of the Biological Society was declared to be the discovery of the laws of organic life, the forces which bring together the primary organic cells and the results of their combination. The necessity of providing for organized special work was insisted on, and the alteration of the by-laws to permit of the erection of classes or departments was recommended. It was argued that the existing divisions of objective natural history would not be curtailed or interfered with, the interest of the meetings of the Academy would be enhanced and the necessity for the organization of special societies would be avoided.

Dr. Ruschenberger lived long enough to be cognizant of the vast advance of biological investigation from those days of cell-relations to the present era of germinal selection, cytodes and microplasms. He had occasion, it is believed, to acknowledge that the hopes of the committee of conference were not well founded and that the existence of Sections in the Academy, while detracting from the interest of the general meetings, has not prevented the organization of special societies which, it appears, are necessary to secure the sympathetic association desired by those interested in distinct lines of investigation.

From August 1860 to July 1861 he was serving also as Fleet

Surgeon, in the Mediterranean. This was his last period of service on ship-board. He never again had occasion to go abroad; indeed even short trips from Philadelphia were hereafter of infrequent occurrence. During the summer vacations when nearly all his associates were absent from the city he remained at home, declaring that the shady side of Chestnut Street was the most desirable summer resort known to him.

During a portion of the period of the civil war, from 1861 to 1864, he was stationed at the Boston Navy Yard, where, in common with everyone connected with the public service he found himself charged with most engrossing duties.

He was on special duty again in Philadelphia during 1865 and 1866 when his attention was professionally occupied with the affairs of the Naval Hospital. He also discharged the duties of President of the Board of Examiners with which he had before been connected as a member. In the American Journal of Medical Sciences for July, 1867 he published a paper entitled "Contributions to the Statistics of Human Growth" based on an examination of 217 candidates for admission to the Naval Academy at Annapolis.

He was retired on age in 1869 with the rank of Surgeon, being later promoted to the grade of Medical Director, with the relative rank of Commodore, as a special recognition of long and efficient service.

While relieved from the performance of professional work in connection with the United States Navy he was far from availing himself of the opportunity to rest, or acknowledging the necessity of doing so. He found himself physically and mentally as vigorous as he had been for the past twenty years with every prospect of a long life. His mother lived until ninety-eight years old. It was now that his active connection with the Academy, the American Philosophical Society and the College of Physicians was productive of the most lasting results.

On the organization of the Board of Trustees of the Building Fund of the Academy in 1867 he had been chosen President thereof, and from that time until his death, while the work of collecting subscriptions was in progress and later during the erection of the buildings, he was indefatigable in the discharge of the duties of this position. The work accomplished is set forth in the fourteen elaborate published reports prepared by him. They cover the operations of the

Board from 1867 to 1878 and during 1890, 1891 and 1892, the history of the inactive intermediate years having been left by him fully recorded in manuscript. In support of this enterprise he published in 1871 an address on the claims of the Academy to public favor, in the Penn Monthly for November 1873 an article on the value of original scientific research and, on the occasion of the removal of the Academy to the new building, a report to the contributors on the condition of the society at that time, together with numerous replies, statements and appeals in the newspapers. The buildings of the Academy are, in truth, whether regarded as meritorious or faulty, the visible evidence of Dr. Ruschenberger's zeal, industry and perseverance and the memorial, if one were to be assigned him, most consonant with his tastes and desires.

He was elected one of the Vice-Presidents of the Academy in January, 1869, to fill the position rendered vacant by the death of John Cassin. At the annual meeting of the same year he was elected to the highest position in the gift of the society which he held until 1881 when, having declined a renomination, he was succeeded in the Presidency by Dr. Joseph Leidy.

From 1876 until the close of his service as President, Dr. Ruschenberger presented a series of reports at the annual meetings of the Academy reviewing the work of the society. In the first report thus presented he defines his attitude towards the department of instruction. provision for which had been incorporated in the new code of by-laws just then adopted. He gives emphatic endorsement to the idea of providing support by endowment of positions for original investigators, but deprecates the conferring of empty titles and points out the disadvantage of entrusting the control of departments of the museum to those over whom, in the absence of compensation, there is no easily administered method of control. He held that the Academy's function was the encouragement of original research, its legitimate work beginning where that of the University ceases, and that the teaching of science could better be done by organizations having instruction for their primary object. . His active co-operation was not, however, interfered with when the opposite opinion was practically sustained by the majority of his associates. While, therefore, he was never in sympathy with the department of instruction, he acted on the belief, as expressed by him to one of his Vice-Presidents about this time, "that the institution will live and prosper long after we are

gone, when we can no longer have a voice in its management, and under theories of administration entirely different from ours, so that it is wise to enforce our own views if we can, but if not, to help along as far as practicable, the views of the dissenters."

A minute of appreciation and regret was adopted on his declining a renomination for the Presidency. His executive work in the Academy did not, however, cease. He became a member of the Council almost immediately and he was elected a Curator in 1882. On the death of Dr. Leidy in April 1891, he became Chairman of the Board of Curators, which position he held during the rest of his life. His services as Councillor were invaluable because of his retentive memory and his accurate knowledge of Academy traditions and history during nearly half a century.

He served on the Publication Committee from 1872 to 1878 and on the Library Committee from 1873 until his death.

He was Director of the Conchological Section continuously from 1869, the year of its formation, and of the Botanical Section from 1876 to 1894. He also served terms as Director of the Biological and Microscopical Section and as Vice-Director of the Mineralogical and Geological Section. Until incapacitated by failing health he was rarely or never absent from the meeting of these bodies while officially connected with them.

Although he devoted the greater portion of his time to the affairs of the Academy they did not absorb his entire attention. He became a member of the College of Physicians of Philadelphia in March 1836, was Vice-President from May 1875 to May 1879 and President from May 5, 1879 until January, 1883.

He was elected a member of the American Philosophical Society October 17, 1849. The high appreciation in which he was held by his fellow-members is shown by the fact that he was annually re-elected to the Vice-Presidency of that Society from January, 1885. His services to these societies have been recounted in biographical notices specially prepared for them and need not be dwelt on here.

The following is a list, probably incomplete, of other societies to which Dr. Ruschenberger belonged, with the dates of his election:

County Medical Society of Philadelphia, March 24, 1831.

United States Naval Lyceum, New York, February 1, 1836.

Franklin Institute, April 15, 1840.

College of Physicians and Surgeons of New York, Feb. 22, 1845.

American Institute, New York, June 13, 1845.

Military Order of the Loyal Legion, October 20, 1836.

Pennsylvania Horticultural Society, March 16, 1886.

Pennsylvania Zoological Society, October 13, 1887.

Philadelphia College of Pharmacy (honorary), March 27, 1893.

In addition to the literary work heretofore noted he prepared and published in connection with the Academy, the College of Physicians and the American Philosophical Society biographical notices of the following persons:—

Charles Pickering, M. D. Proc. Acad. Nat. Sci. Phila., 1878. William S. Vaux. Proc. Acad. Nat. Sci. Phila., 1882.

Robert Bridges, M. D. Proc. Acad. Nat. Sci. Phila., 1882 and Proc. Am. Phil. Soc., XXI, 1884.

Thomas Stewardson. Trans. Col. Phys. Phila., 1884.

George Fox, M. D. Trans. Col. of Phys. Phila., 1884.

Robert E. Rogers, M. D. Proc. Am. Phil. Soc., XXII, 1885.

George W. Tryon, Jr. Proc. Acad. Nat. Sci. Phila., 1888.

Caspar Wister, M. D. Trans. Col. Phys. Phila., 1890.

Gouverneur Emerson, M. D. Proc. Am. Phil. Soc., XXIX 1891.

Joseph Leidy, M. D. Proc. Am. Phil. Soc., XXX, 1892.

William B. Rogers. Proc. Am. Phil. Soc., XXXI, 1893.

William V. Keating, M. D. Proc. Am. Phil. Soc., XXXIII, 1895.

These notices were all characterized by accuracy of detail and, for the most part, sympathetic judgment and a generous acknowledgment of merit. His last months were occupied in the congenial work of collecting material for a history of the Academy. With much pains and patience he had collected a mass of details from unexpected sources regarding individuals long since dead and events almost forgotten. No trouble was too great if it resulted in an addition to knowledge or an increase of accuracy. It is related that on one occasion he made a journey to Washington to verify a date, and the amount of correspondence involved in his researches was such as to discourage one not endowed with equal persistency or less enthusiastically devoted to the work. His manuscript notes are in the possession of the Academy and will be of value to the future historian of the society.

He was confined to his house during the winters of 1894 and 1895

by an annoying bronchial affection, which, added to the infirmities of advanced age, rendered it imprudent for him to encounter variations of temperature. While thus prevented from giving the usual attention to his official duties, his time was congenially occupied in correspondence, composition and study, no diminution of mental clearness or activity being apparent to the friends whom he greeted so cordially. During the late winter his vital powers gradually but steadily failed, until after six hours of unconsciousness the close of his busy and useful life was reached, calmly and without acute suffering, March 24th, in its eighty-eighth year.

Dr. Ruschenberger was a man of striking individuality. The dominant notes of his character were lovalty to truth, as he understood it, and unsparing devotion to duty. His prejudices were strong and his affections warm. He was a strict disciplinarian, but he never exacted from others what he was not prepared to render himself. He was frequently severe in his criticisms, which were, however, in the main salutary. While assuming a stern demeanor to those whom he thought deficient in a sense of duty, to the earnest student he was always helpful and encouraging. To those who knew him intimately, his innate gentleness was apparent, an affectionate word or a kindly proffer of assistance, especially during his later and less robust years, at once eliciting evidence of grateful emotion. He was impatient of what he called "indirection," preferring on the part of others the frankness which he was not afraid to employ himself.

His æsthetic tastes were austere in the extreme. He cared but little about art as such, and the utter absence of ornamentation from the interior of the museum and library of the Academy is due to this peculiarity of the Chairman of the Board of Trustees of the Building Fund rather than to economic necessity. He once remarked that had he his way he would pull down to a level with the house tops, all the church steeples, as they were unsightly and useless. Whether this feature of his character was due to inheritance, to education or to long association with an environment where the refinements of ornamentation would be out of place cannot be determined. His attitude toward literature was equally severe. He regarded the matter-of-fact narrative of "Robinson Crusoe" as the ideal novel, while the glowing imagery of Pierre Loti's "An Iceland Fisherman" was pronounced "unreadable stuff."

He had, however, that precious endowment, a well devolped sense of humor. His conversation was frequently enlivened by the relation of laughter-provoking incidents from his wide and varied experience, while the good things related by others were heartily enjoyed by him.

A friend having asked him shortly after his eighty-third birthday what he had learned of most value during his long life, he replied after a moment's reflection, "Well, I believe I have learned not to be too cock-sure of anything."

The official who endeavors to perform his duty without fear or favor is certain to antagonize the ignorant, the selfish, and the unscrupulous as well as those holding honestly different opinions. This is equally true of the officer of a society, the chairman of a committee or a Metropolitan police commissioner. Dr. Ruschenberger was no exception to the rule. When convinced that he was right he was, notwithstanding his tolerant theories, but little disposed to make concessions, sometimes holding tenaciously to his opinions even in the face of an adverse decision by the majority. Hostile critics were therefore not lacking, but he was probably consoled by the reflection that "he who never had an enemy was never worthy of having a friend." Friends, steadfast and warm, he had; friends to whom he had endeared himself by his sterling qualities of heart and mind.

While he treated the religious opinions of others with toleration and respect, he left his own to be inferred. He certainly was not in visible union with any recognized form of orthodoxy, and would probably not resent the assertion that he was in sympathy with modern agnosticism in its negative and least aggressive sense. If an upright life devoted during all its active years to the intellectual advancement of mankind, and a reverent recognition of the Divine Mind in Nature be taken as evidence, then may we believe that had Dr. Ruschenberger lived when men cherished the same truths under different formulæ his motto would have been ad Majorem Dei gloriam.

Messrs. Charles C. Harrison, John M. Justice and Howard W. Dubois were elected members.

The following papers were ordered to be printed:-